<u>CLAIMS</u>

1   1.   A method for treating melanoma in a mammalian subject, comprising the

2   step of administering to the subject an immunologically-effective amount of a xenogeneic

3   differentiation antigen of the same type as a differentiation antigen expressed by melanoma cells

4   of the subject.

1   2.   The method according to claim 1, wherein the xenogeneic melanoma-

2   associated differentiation antigen is tyrosinase.

3.   The method according to claim 1, wherein the xenogeneic melanoma-

associated differentiation antigen is gp75.

4   The method according to claim 1, wherein the xenogeneic antigen is a

human differentiation antigen, and the subject is a non-human mammal.

5.   The method according to claim 4, wherein the xenogeneic melanoma-

associated differentiation antigen is tyrosinase.

1   6.   The method according to claim 4, wherein the xenogeneic melanoma-

2   associated differentiation antigen is gp75.

1   7   The method according to claim 1, wherein the xenogeneic differentiation

2   antigen is a murine differentiation antigen.

1   8.   The method according to claim 7, wherein the subject is a human.

1   9.   The method according to claim 7, wherein the subject is a dog.

1   10.   The method according to claim 1, wherein the xenogeneic melanoma-

2 associated differentiation antigen is administered as a vector comprising a DNA sequence

3 encoding the xenogeneic therapeutic melanoma-associated differentiation antigen under the

4 control of a promoter which promotes expression of the xenogeneic melanoma-associated

5 differentiation antigen in the subject.

1   11.   The method according to claim 10, wherein the xenogeneic melanoma-

2 associated differentiation antigen is a human differentiation antigen.

1   12.   The method according to claim 11, wherein the xenogeneic melanoma-

2 associated differentiation antigen is human tyrosinase.

1   13.   The method according to claim 11, wherein the xenogeneic melanoma-

2 associated differentiation antigen is human gp75.

1   14.   The method according to claim 10, wherein the xenogeneic melanoma-

2 associated differentiation antigen is a murine differentiation antigen.

1   15.   The method according to claim 14, wherein the xenogeneic melanoma-

2 associated differentiation antigen is murine tyrosinase.

1   16.   The method according to claim 14, wherein the xenogeneic melanoma-

2 associated differentiation antigen is murine gp75.

1   17.   The method according to claim 10, wherein the plasmid has the sequence

2 given by sequence ID No. 1 and the subject is a non-human.

1   18.   The method according to claim 10, wherein the plasmid has the sequence

2   given by sequence ID No. 2 and the subject is not a mouse.

1   19.   The method according to claim 1, further comprising the step of

2   administering a syngeneic differentiation antigen of the same type as the xenogeneic

3   differentiation antigen, said syngeneic differentiation antigen being administered at the same time

4   as or subsequent to the xenogeneic differentiation antigen.

1   20.   A method for treating canine malignant melanoma in a dog suffering from

2   canine malignant melanoma comprising administering to the dog an immunologically-effective

3   amount of a xenogeneic differentiation antigen of the same type as a differentiation antigen

4   expressed by melanoma cells of the dog.

1   21.   The method according to claim 20, wherein the xenogeneic melanoma-

associated differentiation antigen is tyrosinase.

1   22.   The method according to claim 20, wherein the xenogeneic melanoma-

associated differentiation antigen is human tyrosinase.

1   23.   The method according to claim 20, wherein the xenogeneic melanoma-

2   associated differentiation antigen is administered as a vector comprising a DNA sequence

3   encoding the xenogeneic therapeutic melanoma-associated differentiation antigen under the

4   control of a promoter which promotes expression of the xenogeneic melanoma-associated

5   differentiation antigen in the dog.

1   24.   The method according to claim 23, wherein the vector has the sequence

2   given by Seq. ID. NO. 1.

1   25. The method according to claim 23, wherein the vector has the sequence

2 given by Seq. ID. NO. 2.

1   26. A vector comprising the sequence given by Seq. ID No. 1.

1   27. A vector comprising the sequence given by Seq. ID No. 2.